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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,359	03/16/2001	Taeyoung Yoon	49662 [72021]	7721
21874	7590	11/05/2003	EXAMINER	
EDWARDS & ANGELL, LLP			TRUONG, TAMTHOM NGO	
P.O. BOX 9169			ART UNIT	
BOSTON, MA 02209			PAPER NUMBER	
			1624	15
DATE MAILED: 11/05/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/811,359

Applicant(s)

YOON ET AL.

Examiner

Tamthom N. Truong

Art Unit

1624

-- The MAILING DATE of this communication appears n the cover sheet with the c rrespondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-68 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The previous finality is withdrawn herein in light of applicant's amendment. However, because of the broad scope of all the claims, the following restriction is necessary.

#### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 1-8 (in part), 24-27 (in part), 30, 35, and 39-68, drawn to compounds of the formulae in claims 1, 2, or 3 having the following substituents:

Ar is phenyl or 1- or 2-naphthyl;

R<sub>2</sub> is not a heteroaryl or containing 3- to 7- membered heterocyclic group (i.e., Y and Z are not 3- to 7- membered heterocyclic group),

Also, drawn to composition thereof, and method of treating an anxiety disorder, stress-related disorder, or an eating disorder,

classified in classes 514, and 544, various subclasses depending on substituents.

2. Claims 1, 3-8 (in part), 24-27 (in part), 30, and 35, drawn to compounds of the formulae in claims 1, 2, or 3 having the following substituents:

Ar is heteroaryl;

R<sub>2</sub> is a heteroaryl or containing 3- to 7- membered heterocyclic group (i.e., Y and Z are 3- to 7- membered heterocyclic group),

Also, drawn to composition thereof, and method of treating an anxiety disorder, stress-related disorder, or an eating disorder, classified in classes 514, and 544, various subclasses depending on substituents. Further restriction and election of species will be required if this group is elected.

3. Claims 9-13 (in part), drawn to compounds of formula A with the following substituents:

Ar is phenyl or naphthyl;

R<sub>x</sub> and R<sub>y</sub> do not form a ring, and do not contain a 3- to 7- membered heterocyclic ring;

Or, Y and Z are not a 3- to 7- membered heterocyclic ring.

classified in classes 514, and 544, various subclasses depending on substituents.

4. Claims 9-13 (in part), drawn to compounds of formula A with the following substituents:

Ar is heteroaryl;

R<sub>x</sub> and R<sub>y</sub> do not form a ring, but may contain a 3- to 7- membered heterocyclic ring;

Or, Y and Z are (independently) a 3- to 7- membered heterocyclic ring.

classified in classes 514, and 544, various subclasses depending on substituents.

5. Claims 14 and 23, drawn to compounds of formula A, or the formula having a ring -N A, classified in classes 514, 544, various subclasses depending on

substituents. Further restriction and election of species will be required if this group is elected.

6. Claims 15 and 16, drawn to compounds of the formula having  $-O-R_x$ , classified in classes 514, 544, various subclasses depending on substituents.
7. Claims 17-22 (in part), drawn to compounds of formula B having the following substituents:

Ar is phenyl or naphthyl;

G does not contain a 3- to 7-membered heterocyclic group;

$R_x$  and  $R_y$  do not contain a 3- to 7-membered heterocyclic group,  
classified in classes 514, 544, various subclasses depending on substituents.

8. Claims 17-22 (in part), drawn to compounds of formula B having the following substituents:

Ar is heteroaryl;

G contains a 3- to 7-membered heterocyclic group;

$R_x$  and  $R_y$  (independently) contain a 3- to 7-membered heterocyclic group,  
classified in classes 514, 544, various subclasses depending on substituents.

Further restriction, and election of species will be required if this group is elected.

9. Claims 28 drawn to method for treating a depression or bipolar disorder,  
classified in class 514, various subclasses depending on substituents.
10. Claims 29, drawn to method for treating anorexia nervosa, bulimia nervosa, or  
obesity, classified in class 514, various subclasses depending on substituents.

11. Claims 31-34, drawn to a “method for localizing CRF receptors...”, and “method of inhibiting the binding of CRF to CRF1 Receptor...”, classified in classes 435, 436, various subclasses depending on substituents.
12. Claims 36-38, drawn to “A packaged pharmaceutical composition”, classified in class 206, subclass 828+.

Inventions of Groups 1-12 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated for the following reasons:

- a. Compounds in Groups 1-8 belong to different formulae. Even though those formulae share the “core” of “pyrimidinyl”. Such a core is well known, and is not applicant’s contribution to the art. Therefore, it is the combination of pyrimidinyl ring with  $R_2$ , Ar,  $R_x$ , and  $R_y$  that give distinct physical and chemical properties to the compounds of each group. Thus, a reference anticipated the compounds of one groups would not anticipate or render obvious compounds of the other groups. Hence, compounds in Groups 1-8 are patentably distinct over each other, and pose a burden of searching.
- b. The method claims in Groups 1, 2, and 9-11 are unrelated to each other. The method claims in Groups 1 and 2 are drawn to the treatment of “anxiety disorder...” whereas the method claims in groups 9 and 10 are drawn to the treatment of “depression or bipolar disorder”, and “anorexia nervosa,..., obesity”. While the disorders seem

somewhat related, each disorder can be treated by an entirely different agent. For example, the agent that treats obesity might contraindicate in the treatment of anxiety because it might have too much stimulant effect. Note, while Groups 1 and 2 are drawn to the same method claims, said groups are different because different compounds are used. Thus, the methods in Groups 1, 2, 9, and 10 are patentably distinct from each other. The method claims in Group 11 are drawn to 'bioassay' methods which are totally unrelated to methods of treatment in Groups 1, 2, 9, and 10.

c. The invention of Group 12 is drawn to a "packaged pharmaceutical composition" which belongs to different class and subclass. The search for Group 12 is not dependent on the compound or method claims. Furthermore, the design of such "a packaged pharmaceutical composition" is too unclear for a meaningful search.

A telephone call was made to Mr. John B. Alexander on 10-29-03 to request an oral election to the above restriction requirement, but a written restriction is preferred.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 703-305-4485. The examiner can normally be reached on M-F (7 am -12 pm, and 3 pm - 6 pm) starting from 10-1<sup>st</sup> -03.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached on 703-308-4716. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

T. Truong

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October 29, 2003



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